



**NAICS 334, 335 Computers, Electronics, Appliances,  
Electrical Equipment Total Energy Input: 728 Trillion Btu**

**Energy Export 0.35**

**Distribution  
losses 4**

**Fossil  
Energy  
Supply  
127**

**Energy  
Supply  
321**

•Fuels  
•Purchased  
Electricity  
and Steam

**Utility/  
Power  
Plant  
194**

**Electricity  
generation and  
transmission  
losses 403**

**Facilities/HVAC/Lighting 112**

**Recycle Energy**

**Central Energy  
Generation/  
Utilities 321**

• Steam Plant (42)  
• Fossil Power  
(**<0.4**)  
• Direct Fuel Supply  
(75)  
• Purchased  
Electricity (194)

**Energy  
Distribution  
311**

• Steam Piping  
• Fuel Piping  
• Transmission Lines

**Energy Conversion  
183**

• Process Heating (100)  
(steam systems, heat exchangers,  
fired heaters, heat pumps)  
• Process Cooling/  
Refrigeration (17)  
• Electrochemical (5)  
• Machine Drives (53)  
(pumps, compressors, fans, blowers,  
conveyors, mixers)  
• Onsite Transport (1)  
• Other (7)

**Process Energy Systems**

**Recycle Energy**  
By-product fuels and  
feedstocks, heat

**Process  
Energy Use  
134**

• Assembly and  
Fabrication  
• Semiconductor,  
Circuit Board  
Processes  
• Laminating  
• Melting  
• Welding  
• Electrolytic Cells  
• Drying  
• Waste Handling

**Energy Losses**

Losses in boilers and  
electricity generation  
losses **10**

Losses in pipes, valves,  
traps, electrical  
transmission lines **16**

**Energy Losses**

Losses due to equipment  
inefficiency (motors,  
mechanical drive, waste  
heat) **49**

Process energy losses  
from waste heat, flared  
gases, by-products  
**TBD**

**Industrial Plant Boundary**

